

## AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE

J

PAGE OF PAGES

1

6

2. AMENDMENT/MODIFICATION NO.

0005

3. EFFECTIVE DATE

21-Jan-2005

4. REQUISITION/PURCHASE REQ. NO.

A52D5043151004

5. PROJECT NO.(If applicable)

6. ISSUED BY

CODE

W911KF

7. ADMINISTERED BY (If other than item 6)

CODE

DOC-ANNISTON ARMY DEPOT  
DIRECTORATE OF CONTRACTING  
7 FRANKFORD AVENUE  
ANNISTON AL 36201-4199

See Item 6

8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)

X

9A. AMENDMENT OF SOLICITATION NO.  
W911KF-05-Q-0049

X

9B. DATED (SEE ITEM 11)  
14-Dec-2004

10A. MOD. OF CONTRACT/ORDER NO.

10B. DATED (SEE ITEM 13)

CODE

FACILITY CODE

## 11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☒ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer☐ is extended.☒ is not extended.

Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods:

(a) By completing Items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted;

(c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN

REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS.  
IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor

☐

is not,

☐

is required to sign this document and return

copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

SEE PAGE TWO

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)

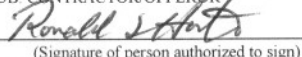
Ronald L. Harter, Vice President

16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)

TEL:

EMAIL:

15B. CONTRACTOR/OFFEROR

  
(Signature of person authorized to sign)

15C. DATE SIGNED

26 Jan 2005

16B. UNITED STATES OF AMERICA

BY

(Signature of Contracting Officer)

16C. DATE SIGNED

21-Jan-2005

## SECTION SF 30 BLOCK 14 CONTINUATION PAGE

## SUMMARY OF CHANGES

(End of Summary of Changes)

**The following items are applicable to this modification:**QUESTIONS AND ANSWERS

1. The purpose of this modification is to provide questions and answers submitted by prospective bidders and provide picture of a similar Universal Hydraulic Test Stand.

- a. Question: Please confirm min and max oil temperatures that will be required for component testing.

**Answer: Test temperature for components ranges from 85F to 185F.**

- b. Question: Please confirm that a computer can be used to display data to the operator.

**Answer: Digital displays are permissible, with analog gages being preferred. If digital displays are used they should be protected from interference from other sources. It is strongly preferred that a computer NOT be used.**

- c. Question: Please clarify your answer provided in Amendment 0003.

**Answer: The Specification refers to the following subsystems:**

**Main system pressure circuit.  
Auxiliary pressure circuit.  
Static pressure circuit.  
Supercharge circuit.  
Motor test circuit.**

- d. Question: In Amendment 0003, is “high pressure” the auxiliary pressure? And which motor to rotate which pump are you referring to?

**Answer: The “high pressure” mentioned in Amendment 0003 refers to the Static Pressure Circuit.**

**The “motor” mentioned would be the variable speed drive mentioned in section 3.1.4.3. It will be used to rotate/operate the pump being tested, such as the hydraulic pump 13211E3126 mention in section 9.0.**

- e. Question: Specification para. 3.1.5, Motor test circuit, includes para. 3.1.5.3 which refers to both the main and auxiliary pumps. However, para. 1.0 Scope clearly states that the motor test circuit is to be an independent circuit, and also states that the main and auxiliary pumps are also independent circuits. Please clarify what is to be independent and what is not.

**Answer: Paragraph one is correct. The circuits: main system pressure circuit, auxiliary pressure circuit, static pressure circuit, supercharge circuit , and the motor test circuit must all be independent. Multiple circuits are sometimes used simultaneously during the testing of some components.**

- f. Question: Para. 3.4.11 calls for cooling above 80°F, but para. 3.4.12 requires a temperature range down to 70°F. This lower temperature will not be possible with 70°F cooling water. Please clarify.

**Answer: A range of 80F to 180F should suffice. This reduces the margin between the capability of the test stand and the test requirements such as the 85F- 95F required for the Hydraulic Power Pack Assembly.**

g. Question: In para. 3.1.5.1, does the hydraulic motor run only at 1800 rpm? Does the circuit need to be bi-directional? Is the motor open or closed hydraulic loop? What pressure and/or flow does it need?

**Answer: The appropriate hydraulic circuit (Main or Auxiliary) shall be used to supply hydraulic power to the motor.**

h. Question: Para. 3.1.4.2 calls for the supercharge pump to have settable flow. The flow of a supercharge pump is usually automatically determined by the inlet flow of the main pump being tested. Do you really need supercharge pump flow to be settable?

**Answer: Pressure should be settable, not flow.**

i. Question: Para. 3.1.4.4 calls for speeds down to zero rpm. Extremely low speeds are impracticable without auxiliary cooling for the electric motor. Can you accept a minimum of 10% of base speed ?

**Answer: Zero rpm is required. (The time spent 0 - 500 rpm is normally short.)**

j. Question: The torque sensors in para. 3.1.4.5 and 3.1.5.2 call for accuracy of 0.5%. Is this of full scale, since this accuracy cannot be achieved at extremely low readings?

**Answer: 0.5% of Full Scale**

k. Question: Paragraph 3.4.6 specifies that the temp. of the test fluid be held to +/- 5 deg. of the set point. Paragraph 3.4.11 specifies a temp. range of the test fluid to be 70 to 180 deg. F. The cooling water available at ANAD is 70 deg. If these specifications are correct we will have to supply a very large and expensive chiller to maintain the set temp. Please verify the specifications.

**Answer: A range of 80F to 180F should suffice. This reduces the margin between the capability of the test stand and the test requirements such as the 85F- 95F required for the Hydraulic Power Pack Assembly.**

l. Question: Main system pressure circuit, section 3.1.1.2 The 4 way, 3-position directional valve called out will it be electrically operated or manual operated?

**Answer: The valve can be electrically or manually operated. However, the valve be easily operable at up to 500psi (preferably 1000psi). The test stand is frequently used to operate (extend and retract) hydraulic cylinders of various sizes. This valve is used to determine if the cylinder is being extended or retracted. The valve is switched from one position to the other without removing hydraulic pressure.**

m. Question: Paragraph 3.1.1.2 Does the four-way, 3 position valve need to handle the full 60 gpm?

**Answer: Yes. The valve must also be easily operable at up to 500psi (preferably 1000psi). The test stand is frequently used to operate (extend and retract) hydraulic cylinders of various sizes. This valve is used to determine if the cylinder is being extended or retracted. The valve is switched from one position to the other without removing hydraulic pressure.**

n. Question: Regarding paragraph 3.4.5- The most current revision level of this specification is D. Please advise which is to be our responsibility.

**Answer: The specification requires revision level C of MIL-PRF-4610C.**

o. Question: Regarding Paragraph 3.1.5.3- 60gpm at 3000psi requires more than 100hp. Are you planning on running the pump at a flow and pressure to keep the HP under 100?

**Answer: No. The manufacturer is to size the electric motor to meet requirements, but it must be at least a 100hp motor. The electric motor can be larger than 100hp, but it cannot be less than 100hp minimum per paragraph 3.1.5.3.**

p. Question: Is the directional valve described in paragraph 3.1.1.2 to be manual or solenoid operated with a selector switch?

**Answer: Selection of the valve type is left to the stand manufacturer. The valve must be easily operable at up to 500psi (preferably 1000psi). The test stand is frequently used to operate (extend and retract) hydraulic cylinders of various sizes. This valve is used to determine if the cylinder is being extended or retracted. The valve is switched from one position to the other without removing hydraulic pressure.**

q. Question: What is the cylinder bore and rod size described in paragraph 9.0. It may be on the drawings, but we have not gotten them yet.

**Answer: The cylinder diameter and length varies. The items listed in paragraph 9.0 are representative parts, not a complete list. The cylinder diameters currently tested (subject to change) are between one and eight inches. The requirements of this specification are for a universal hydraulic test stand.**

r. Question: What is the maximum pressure drop allowed for the return line flow meters?

**Answer: The pressure drop caused by the flow meters should be kept to a minimum.**

s. Question: Are you anticipating selector/shut-off valves for the flow meters? If so, manual or electrical?

**Answer: It was planned for the flow meters to have separate connections (all of the flow meters can be used at one time, or none).**

t. Question: Paragraph 3.1.4.2; Will you ever want to NOT supercharge a UUT pump? In other words, should we incorporate a bypass allowing the UTT to draw directly from the reservoir?

**Answer: A bypass is not needed.**

u. Question: Regarding 3.1.4.3- If the upcoming drawings do not show this, how much room do you need for the UUT pump? Do you expect the drive's shaft to extend into the UUT chamber (of so, how much?, or be flush to the front panel? Are we to supply the fixturing? If not, what interface is required to be able to utilize yours?

**Answer: Test stand manufacturer is to supply the pump fixture. It must be possible to inspect all pump seals for leaks (pump cannot be mounted directly to test stand cabinet).**

v. Question: Do you need/want a speed pick-up on the shaft to verify shaft speed and/or to operate the drive with a closed loop control, or is the drive's speed frequency/indication enough?

**Answer: We prefer a speed pick-up on the shaft to verify shaft speed.**

w. Question: Regarding 3.1.5- If the upcoming drawings do not show this, how much room do you need for the UUT motor? Do you expect the drive's shaft to extend into the UUT chamber (of so, how much?, or be flush to the front panel? Are we to supply the fixturing? If not, what interface is required to be able to utilize yours?

**Answer: Test stand manufacturer is to supply fixture.**

x. Question: Regarding paragraph 3.1.5.4- Is the power supply's voltage to be adjustable?

**Answer: Paragraph 3.1.5.4 requires that the power supply be capable of providing 24 +5/-0 volts at up to 62 amperes DC.**

y. Question: Regarding paragraphs 3.2.1, 3.2.2, and 3.4.19- Is the test stand frame and enclosure to be corrosion resistant steel, or can it be painted steel per 3.2.1? Please clarify. If painted is ok, is there a paint and/or a painting specification to use?

**Answer: Metals to meet the requirements set forth in section 3.2.2.**

z. Question: Regarding paragraph 3.3.16- Is the timer to be tied into any of the stand's controls in any way?

**Answer: No. Visual only.**

aa. Question: Regarding paragraph 3.4.1- Please clarify the voltage statements. It requires the stand to be initially wired for 460 VAC incoming power. Is it possible that the stand will be required to take 230VAC in the future?

**Answer: The Government will provide 460 volt, three phase power to the main disconnect. It is not anticipated that the stand will be required to take 230 VAC in the future.**

bb. Question: Regarding paragraph 3.4.1- Is the size of the disconnect enclosure to be included in the overall maximum size restriction specified in paragraph 3.3.3?

**Answer: Yes**

cc. Question: Regarding Paragraph 3.4.6 and 3.4.11- Please confirm and/or clarify these paragraphs. The coldest water temp is 70F, but the oil is required to be controlled down to 70F. We would need a chiller to do this.

**Answer: A range of 80F to 180F should suffice. The test stand manufacturer must determine if a chiller is required, and incorporate it into the stand design if it is needed.**

dd. Question: Regarding Paragraph 3.4.7 (last sentence)- Is the phrase 'easily accessible for removing and cleaning' exclude emptying the reservoir? In other words, should we install an external strainer with a shut-off between it and the reservoir so that it does not have to be removed?

**Answer: A strainer which required the reservoir to be drained in order to service the strainer would not be considered 'easily accessible'. Whether or not an external strainer (w/isolation valve) would be considered 'easily accessible' depends on the location of the equipment/piping around it.**

ee. Question: Regarding Paragraph 3.4.8- Are you just looking for a bottom drain, or are we to incorporate a water removal system?

**Answer: This refers to a bottom drain. However, please quote a water removal system as an option.**

ff. Question: Regarding Paragraph 3.4.9- Is this reservoir in addition to the main reservoir? It is a bit small for 60gpm of flow on a test stand with temperature control.

**Answer: Paragraph 3.4.9 refers to the main reservoir. If a manufacturer's design requires a larger reservoir, this should be clearly indicated on their proposal.**

gg. Question: In paragraph 3.1.5.3 of the work statement it is specified that the electrical motor for the main pump shall be rated to 100hp. The main pump has 60gpm at 3000psi (paragraph 3.1.1.1). According to our calculations the electric motor has to be rated to about 120hp (total efficiency of the pump estimated as 0.88). Please advise.

**Answer: The manufacturer is to size the electric motor to meet requirements, but it must be at least a 100hp motor. The electric motor can be larger than 100hp, but it cannot be less than 100hp minimum per paragraph 3.1.5.3.**

hh. Question: In paragraph 3.1.5 (Motor test circuit) of the work statement it is specified that the dynamometer will be rated for 236 foot pounds minimum at 1800rpm. Please advise if the speed range for testing motors is also 0-1800 rpm or different.

**Answer: The speed range for testing motors is 0-1800 RPM. The specification is for a universal hydraulic test stand.**

ii. Question: Main system pressure circuit, section 3.1.1.2. The 4 way, 3 position direction valve is left up to the contractor.

**Answer: Selection of the 4 way, 3 position direction valve is left up to the contractor.**

jj. Question: Auxiliary pressure circuit. Section 3.1.2.2 paragraph 9 is not in specifications?

**Answer: Paragraph 9 is included in Amendment 1 dated 16 December 2004, page 10.**

kk. Question: Does Anniston Army Depot have an preference in control manufactures? Example: Square D, Barksdale, and Tescom.

**Answer: The Government does not specify suppliers. Selection of control manufacturers is left up to the contractor.**

ll. Question: DC motor test circuit, section 3.1.5.4, reference part number 12282832 is not in bid specifications. Should it be in bid?

**Answer: Part number 12282832 is included in Appendix 1, Drawings.**

2. Attached is a picture of a similar type Universal Hydraulic Test Stand.
3. The offer due date and time remains unchanged..
4. All other terms and conditions remain unchanged.

